

Docket No. 16–15469

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**IN THE UNITED STATES COURT OF APPEALS  
FOR THE NINTH CIRCUIT**

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NARUTO, by and through his Next Friend,  
Plaintiff-Appellant,

v.

DAVID J. SLATER, et al.,  
Defendants-Appellees

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On Appeal from the United States District Court  
for the Northern District of California  
Case No. 3:15-cv-04324 (Orrick, J.)

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**BRIEF OF AGUSTIN FUENTES, PRIMATOLOGIST, MACAQUE  
EXPERT, AND PROFESSOR OF ANTHROPOLOGY *AS AMICUS CURIAE*  
*in Support of Reversing the District Court.***

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Professor Agustin Fuentes files his *amicus curiae* brief pursuant to Rule 29 of the Federal Rules of Appellate Procedure. The *amicus curiae* brief supports plaintiff/appellant Naruto, and seeks to reverse the district court's ruling. Neither parties' attorney authored the brief, and no person contributed funds to prepare or submit the brief. All parties have consented to the filing of the brief.

### **INTEREST OF *AMICUS CURIAE***

Professor Agustin Fuentes is an American primatologist and biological anthropologist whose work focuses largely on human and non-human primate interaction, and the Chair of the Department of Anthropology at the University of Notre Dame. He received his Ph.D in Anthropology from the University of California, Berkeley, in 1994. He has been a member of the International Primatological Society, the American Society of Primatologists, and the International Society for Anthrozoology, among other professional organizations. Dr. Fuentes has worked with macaque populations focusing on human-macaque interactions and the spread of diseases between humans and macaques. He is the author of the books *Centralizing Fieldwork: Critical Perspectives from Primatology, Biological and Social Anthropology* (2011), *Primates in Perspective* (2011), and scholarly journal article *The Ethnoprimateological Approach in Primatology* (2010), among others.

As an expert in primatology with particular expertise in macaque research, Dr. Fuentes has a considerable interest in seeing that courts accurately understand the substantial physical and mental capacities of macaques. He offers this brief to provide an overview of the existing scientific data regarding macaques so as to make clear that their mental and physical capacities are sufficient to create original works of art.

### **INTRODUCTION AND SUMMARY OF ARGUMENT**

Animals can be the authors of valuable works of art, and there is a market for art created by animals. The photographs at issue in this case are works of art authored by Naruto, the macaque. This case is not nearly as unique as one might initially assume, and the best available research strongly supports the conclusion that Naruto easily satisfies the basic requirements for authorship.

Specifically, the internationally famous “Monkey Selfie” resulted from a series of purposeful and voluntary actions by Naruto, unaided by Defendant Slater, resulting in original works of authorship by Naruto. Slater admits Naruto created the Monkey Selfies, writing in his own book:

My experience of these monkeys [crested macaques] suggested that they were not just highly intelligent but were also aware of themselves. . . . It was only a matter of time before one pressed the shutter resulting in a photo of herself [sic]. She [sic] stared at herself with a new found appreciation, and made funny faces – in silence – just as we do when looking in a mirror. She [sic] also, importantly,

made relaxed eye contact with herself [sic], even smiling....She [sic] was certainly excited at her [sic] own appearance and seemed to know it was herself [sic].

ER 1 at 6.

The scientific literature is clear that Naruto's behavior in creating these original works was within the typical social behaviors of macaques, and primates in general. Studies have demonstrated that macaques like Naruto manipulate objects for a desired effect, therefore it would be well within the capacity of Naruto's abilities to manipulate the camera in such a way that he ended up taking a photo of himself.

The meanings of legal protections evolve with advances in scientific discovery and invention. "Authorship" under the Copyright Act, 17 U.S.C. § 101 et seq., must be construed broadly enough so as to incorporate uncontroversial, scientifically accepted understandings about the ability of animals to create works of art. To put the matter plainly, there is no dispute that Naruto created the images in question. Naruto is, therefore, the author.

## **ARGUMENT**

### **I. Legal Definitions Adapt to Accommodate New Scientific Understandings.**

American jurisprudence has consistently developed and adapted with the advancement of science and technology. *See, e.g., Caetano v. Massachusetts*, 136

S. Ct. 1027, 1031 (2016) (“Electronic stun guns are no more exempt from the Second Amendment’s protections, simply because they were unknown to the First Congress, than electronic communications are exempt from the First Amendment, or electronic imaging devices are exempt from the Fourth Amendment.”); *Brown v. Entm’t Merchants Ass’n*, 564 U.S. 786, 790 (2011) (“[W]hatever the challenges of applying the Constitution to ever-advancing technology, the basic principles of freedom of speech and the press, like the First Amendment’s command, do not vary when a new and different medium for communication appears.” (internal quotation marks omitted)).

Some of the Supreme Court’s most significant modern decisions have hinged, at least in part, on attempts to understand emerging science and empirical data. In the criminal law realm alone, the Court ruled that a twelve person jury was not required based on empirical data, *Williams v. Florida*, 399 U.S. 78, 101-02 (1970), that a five person jury was too small, *Ballew v. Georgia*, 435 U.S. 223, 245 (1978), and that the intellectually disabled and juveniles are categorically excluded from capital punishment based, in part, on compelling neurological evidence. *Roper v. Simmons*, 543 U.S. 551, 569 (2005); *Atkins v. Virginia*, 536 U.S. 304, 317-21 (2002).

More generally, data and empirical evidence has emerged as an important part of judicial construction. *See generally* Rosemary J. Erickson & Rita J. Simon, *The Use of Social Science Data in Supreme Court Decisions* (1998) (examining use of social science data in thirty-five Supreme Court cases involving abortion, sex discrimination, and sexual harassment from 1972 through 1992). As Justice Breyer has explained, “In this age of science, science should expect to find a warm welcome, perhaps a permanent home, in our courtrooms.” Stephen Breyer, *Introduction* to Michael J. Saks et al., *Reference Manual on Scientific Evidence 2*, Federal Judicial Center (2d ed. 2000). The turn to science is undeniable and can be found in nearly every realm of judicial decision making. *See, e.g., Kansas v. Hendricks*, 521 U.S. 346, 359-60 (1997) (using evolving science about the mental health of sex offenders to evaluate the constitutionality of indefinite, non-criminal detention); *Washington v. Glucksberg*, 521 U.S. 702, 730-35 (1997) (consulting data in order to assess whether there is a right to assisted suicide).

In this case, Plaintiff is asking for nothing out of the ordinary. It asks only for an interpretation of the Copyright Act that is consistent with an indisputable scientific consensus about the physical and mental capabilities of macaque monkeys. Plaintiff stated in its Opening Brief to the Ninth Circuit:

Congress explicitly noted that the history of copyright law “has been one of gradual expansion in the types of works accorded protection.”

*See* Notes of Committee on the Judiciary, H. Rep. No. 1476, 94th Cong., 2d Sess. 51 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5664. “Authors are continually finding new ways of expressing themselves, but it is impossible to foresee the forms that these new expressive methods will take.” *Id.* Congress enshrined this principle into the Copyright Act itself, explicitly including protections for “original works . . . *now or later developed.*” 17 U.S.C. § 102(a) (emphasis added).

ER at 17.

In this case, scientific data necessarily supports the broad interpretation that Naruto has the capacity to be an author, and behaved in a way that fits within the definition of artistic expression. Judicial decisions “should reflect a proper scientific and technical understanding,” National Research Council, *Reference Manual on Scientific Evidence 2*, Federal Judicial Center (3d ed. 2011), and in this case that means taking notice of the science, outlined below, concluding that macaques in general and Naruto in particular are capable of original acts of creation.

## **II. As a Scientific Matter, Naruto is the Author of the Photographs in Question**

There is a great deal of data demonstrating conclusively that primates have complex social cognition, and are able to manipulate objects to gain desired effects. Primates often use their hands to manipulate items to move them from one state to another. Common examples include nut cracking and related food

acquisition behaviors. C.G. Coehla et al., *Social Learning Strategies for Nut-Cracking by Tufted Capuchin Monkey (Sapajus spp.)*, 9 ANIMAL COGNITION 911-919 (2015); see also Dorothy M. Fragaszy, *Community Resources for Learning: How Capuchin Monkeys Construct Technical Traditions*, 6 BIOLOGICAL THEORY 231-40 (2012). The series of behaviors that resulted in the manipulation of the camera, and subsequent image creation, by Naruto are well within the range of normative manipulation abilities expressed by multiple primate species. The acts of Naruto in his manipulation of the camera should be seen as intentional and original acts that led to the creation of an image.

**A. Macaques are Cognizant of Themselves and Others in Their Group**

Primates, especially macaques and the closely related baboons, have high levels of social cognition, meaning that they are able to process and store large amounts of information regarding social interactions. Louise Barrett & Peter Henzi, *The Social Nature of Primate Cognition*, 272 PROCEEDINGS OF THE ROYAL SOCIETY B 1865-75 (2005); Andrew Whiten, *Humans Are Not Alone in Computing How Others See the World*, 86 ANIMAL BEHAVIOUR 213-21 (2013); D.G. Lindburgh (ed.), *The Macaques: Studies in Ecology, Behavior and Evolution* (1980);

Equally important, as my own research has shown, macaques have a deep and extensive history of interactions with humans across much of Asia. Agustin Fuentes, *Ethnoprimateology and the Anthropology of the Human-Primate Interface* 41 ANNUAL REVIEW OF ANTHROPOLOGY 101-17 (2012); Agustin Fuentes, *Naturecultural Encounters in Bali: Monkeys, Temples, Tourists, and Ethnoprimateology*, 25(4) CULTURAL ANTHROPOLOGY 600-24 (2010).

Naruto, like other macaques, had likely made the connection between manipulation of the camera as an item and the sound of the shutter and the changing image in the lens as the shutter clicked. This may have been interesting for Naruto as he was noted as performing this behavior many times. It is likely that he had seen the human manipulation of the camera and heard the sounds it made and, as is common for macaques, became curious to investigate it on his own. This in no way assumes Naruto had any cognizance of the concept of a photograph but rather that the actions and noises made by the camera were enticing and that through explorative manipulation Naruto was able to cause the camera to make such sounds/actions. Naruto intentionally engaged in interactions with the camera.

**B. Macaques Can Understand Manipulation of Objects to Achieve a Desired Effect**

Macaques are distinctive even among monkeys in their high degree of intelligence and complex sociality. Bernard Thierry, *The Macaques: A Double-Layered Social Organization*, in C.J. Campbell et al. (eds.), *Primates in Perspective* 229-41 (2d ed. 2011); Bernard Thierry, *Unity in Diversity: Lessons from Macaque Societies*, 16 *EVOLUTIONARY ANTHROPOLOGY* 224-38 (2007).

Macaques in particular are characterized by extremely developed capacities for object manipulation, and strong tendencies to engage in such behavior. Macaques' use of objects includes as tools for extractive foraging and the manipulation of objects for social benefits and outcomes. M.A. Huffman et al., *Cultured Monkeys: Social Learning Cast in Stone*, 17(6) *CURRENT DIRECTIONS IN PSYCHOLOGICAL SCIENCE* 410-14 (2008); M.A. Huffman, *Acquisition of Innovative Cultural Behaviors in Nonhuman Primates: A Case Study of Stone Handling, a Socially Transmitted Behavior in Japanese Macaques*, in Cecilia M. Heyes & Bennett G. Galef (eds.), *Social Learning in Animals: The Roots of Culture* 267-89 (1996).

Particularly relevant for this case, macaques can frequently understand basic correlations between acts of object manipulation and specific results. There is no question that macaques manipulate material objects with an expectation of specific

outcomes. They understand, for example, that by hitting snail shells with rocks, they can crack open and retrieve the snail. Naruto's behavior in creating the photographs in dispute is consistent with a macaque's interest in and capacity for sophisticated object manipulation. Naruto certainly understood that he was intentionally engaged in actions with an object that was stimulating. He could recognize the association between his actions and the shutter movement and sound. These photographs are not the result of an accident; they result from specific and intentional manipulation of the camera by Naruto.

**C. Macaques Have Individual Personalities Inclusive of Self-Recognition**

Macaques have individual personalities and varied personality patterns. Christof Neumann et al., *Personality of Wild Male Crested Macaques (Macaca nigra)*, 8(8) PLOS ONE e69383 (2013). These personality characteristics lead to their capacity for highly intentional social activity with others and for self-oriented social behavior.

Far from an automaton, Naruto deliberately undertook a series of acts that created the art in question. The social complexity and cognitive patterns that lead to macaque personalities also give rise to idiosyncratic behavior across different individuals. In fact, the study of comparative personality structure among macaques has itself become an important area of research. *Id.* Recent work shows

the use of differing facial expression to convey different states is well documented in macaques. Seth D. Dobson, *Coevolution of Facial Expression and Social Tolerance in Macaques*, 74(3) AMERICAN JOURNAL OF PRIMATOLOGY 229-35 (2012); Bernard Thierry, *The Macaques: A Double-Layered Social Organization*, in C.J. Campbell et al. (eds.), *Primates in Perspective* 229-41 (2d ed. 2011). The use of differing facial expressions is one of the many variables that macaques deploy in the wide variety of types and patterns of social relationships they exhibit. Erin P. Riley et al., *Socially Tolerant Relationships Among Wild Moor Macaques (Macaca maura)*, 151 BEHAVIOUR 1021-44 (2014). Naruto's actions, his manipulation of the camera to gain desired effect, which resulted in the production of the images in question, is likely a reflection of a particular inquisitive personality. The images produced can be said, in part, to have been produced due to aspects of the particulars of Naruto's specific personality profile.

## CONCLUSION

Assessing the existing data reveals that macaque behavior can easily include the combination of the intentional varying of facial expression and the intentional manipulation of objects to obtain desired outcomes. More specifically, the existing scientific data regarding macaques compels the conclusion that Naruto is the party who created the work of art in question. He has the mental and physical capacity

to undertake the series of actions that resulted in the creation of an original work. Whether or not the image produced was the goal, all of the actions needed to produce that image were undertaken by Naruto, were likely intentional and focused, and are well within the range of macaque capabilities.

Dated: August 4, 2016

Respectfully Submitted,

s/ Corey Page

Attorney for Agustin Fuente

**CERTIFICATE OF SERVICE**

I certify that I electronically filed **BRIEF OF AGUSTIN FUENTES, PRIMATALOGIST, MACAQUE EXPERT, AND PROFESSOR OF ANTHROPOLOGY *AS AMICUS CURIAE*** with the Clerk of the Court for the United States Court of Appeals for the Ninth Circuit by using the appellate CM/ECF system on August 4, 2016.

I certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the appellate CM/ECF system.

s/ Corey Page